

What is claimed is:

1. A rule-based system for selecting components and services for a service delivery system comprising:
 - at least one computer processor associated with:
 - (a) a first data-store of service providers, each service provider being logically linked to a set of services, each service being logically linked to a transmission channel identifier,
 - (b) a second data-store of service delivery system configuration and channel map information, and
 - (c) a third data-store for holding a dynamic listing of selected components chosen from a list of components in response to user input;
 - a user interface operatively associated with said processor for enabling dialogue between a user and the rule-based system, said dialogue comprising input means for selection of service providers and offered services, and presentation means for presenting selected services and service delivery system components; and
 - a service identification mapping capability to provide mapping between a service identifier, a service delivery system channel identifier, and a transmission channel identifier;
 - wherein said rule-based system quantifies service delivery system component requirements in connection with the selected services, and said processor applies rules to evaluate input parameters and selects service delivery system components based thereon.
2. The rule-based system of claim 1 wherein said interface further comprises an input data recognition process for classification of data input by the user.

3. The rule-based system of claim 1 wherein insertion and changes to at least one of said services, service providers, and service delivery system components are possible.
4. The rule-based system of claim 1 wherein said processor interacts with other elements of said rule-based system over a network.
5. The rule-based system of claim 1 wherein said processor interacts with the components of said service delivery system over a network.
6. The rule-based system of claim 1 wherein data generated by said rule-based system is provided to substitute for user-generated data input via said user interface.
7. The rule-based system of claim 1 wherein a service delivery system component listing is provided in a bill-of-material format.
8. The system of claim 7 wherein said user can examine said bill-of-materials, said service provider listing, said set of services, and their respective channel identifiers in a representation mutually agreeable to the system and the user.
9. The rule-based system of claim 1 wherein said services are delivered via a network.
10. The network of claim 4 wherein said network is at least one of a broadcast, interactive, cable, telephone, wireless, HFC, coaxial, twisted-pair, DSL, Ethernet, fiber optic, and TCP/IP network.
11. A rule-based method for selecting components and services for a service delivery system, where system initialization comprises the steps of:

populating a first data-store with (i) service providers, (ii) sets of services, and (iii) a transmission channel identifier for each service in said data-store;

logically linking transmission channel identifiers with services;
and

further logically linking each set of services with the corresponding service provider.

12. A rule-based method for selecting components and services for a service delivery system, where a user and rule-based system dialogue comprises the steps of:

initiating a user interface, wherein a rule representation and evaluation process is enabled, and said user interface subsequently provides information exchange between the user and the rule-based system; and

enabling the user to select from among system components, service provider and corresponding service information,

wherein the rule representation and evaluation process evaluates and validates said user selections and determines any additional components required to administer said services.

13. The method of claim 12 wherein component requirements and selected services are communicated to said user through the user interface.
14. The method of claim 12 wherein the user can elect to remove any of said services from previously entered selections in an interactive manner, and the rule representation and evaluation process automatically updates component requirements for the resulting services selected.
15. The method of claim 12 wherein the user can elect to choose additional services from said service providers in an interactive manner, and the rules

representation and evaluation process automatically updates component requirements for the resulting services selected.

16. The method of claim 12 wherein the rule representation and evaluation process provides a mapping between a service channel identifier, a system channel identifier, and a transmission channel identifier for each set of selected services.
17. The method of claim 12 wherein the rule representation and evaluation process configures values for input parameters necessary for the implementation of said system, based upon an initial entry of a single instance of a value for that parameter.
18. The method of claim 12 wherein the user can elect to receive an output of said bill-of-materials, said service provider listing, said set of services, and their respective service channel identifiers in a representation mutually-agreeable to the user and the rule-based system.
19. A machine readable media containing program code for a rule-based system to at least partially automate the selection of components and services for a service delivery system, wherein:
 - said program code includes instructions for at least one computer processor associated with:
 - (a) a first data-store of service providers, each service provider being logically linked to a set of services, each service being logically linked to a transmission channel identifier,
 - (b) a second data-store of service delivery system configuration and channel map information, and
 - (c) a third data-store for holding a dynamic listing of selected components chosen from a list of components in response to user input;

said program code implements a user interface operatively associated with said processor for (i) enabling dialogue between a user and the rule-based system, said dialogue including selection of service providers and offered services, and (ii) presenting selected services and service delivery system components;

said program code provides a service identification mapping capability to provide mapping between a service identifier, a service delivery system channel identifier, and a transmission channel identifier;

said rule-based system quantifies service delivery system component requirements in connection with the selected services; and

said processor applies rules to evaluate input parameters and selects service delivery system components based thereon.

20. A machine readable media containing program code for implementing a rule-based method enabling a user to select components and services for a service delivery system, said program code:

(i) initiating a user interface, wherein a rule representation and evaluation process is enabled, and said user interface subsequently provides information exchange between the user and the rule-based method; and

(ii) enabling the user to select from among system components, service provider and corresponding service information,

wherein the rule representation and evaluation process evaluates and validates said user selections and determines any additional components required to administer said services.